

Application/Control Number: 09/749,832
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5 1. An apparatus comprising:

an inverted Digital Video Broadcast-Asynchronous Serial Interface (DVB-ASI) signal; and

an inverting adapter adapted to invert the inverted DVB-ASI signal.

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2. The apparatus of claim 1 wherein the inverting adapter comprises a transformer coupled to the inverted DVB-ASI signal, the transformer comprising primary and secondary sides.

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3. The apparatus of claim 1 wherein the inverting adapter inverts the inverted DVB-ASI signal to produce an adapted DVB-ASI signal, and wherein the adapted DVB-ASI signal is coupled to a DVB-ASI device selected from the group consisting essentially of a recorder, a monitor, a decoder, a network, a transmitter, and a distribution amplifier.

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4. The apparatus of claim 2 wherein each of the primary and secondary sides has a polarity, wherein the polarity of the secondary side is opposite to the polarity of the primary side, and wherein the inverting adapter inverts the inverted DVB-ASI signal to produce an adapted DVB-ASI signal.

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5. The apparatus of claim 4 wherein each of the primary and secondary sides comprises an equivalent number of windings.

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6. (Amended) The apparatus of claim 5 wherein the inverting adapter further comprises a body and input and output [connectors] couplings, wherein the inverting adapter is enclosed in the body, and wherein the body is electrically and mechanically coupled to the input and output couplings.

7. The apparatus of claim 1 further comprising a routing switcher, the routing switcher coupled to an input DVB-ASI signal and producing an output DVB-ASI signal and the inverted DVB-ASI signal.

8. The apparatus of claim 7 further comprising a Serial Digital Video (SDV) source that produces an SDV signal, wherein the SDV signal is coupled to the routing switcher, wherein the routing switcher produces an output SDV signal and an inverted SDV signal.

9. The apparatus of claim 8 further comprising an encoder that couples to the output SDV signal and that produces the input DVB-ASI signal.

10. The apparatus of claim 7, wherein the routing switcher comprises a differential amplifier having an input coupled to the input DVB-ASI signal and having true and complement outputs, wherein the true output is the output DVB-ASI signal and the complement output is the inverted DVB-ASI signal.

11. The apparatus of claim 10, wherein the routing switcher comprises the inverting adapter.

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12. The apparatus of claim 1 further comprising a distribution amplifier, the distribution amplifier coupled to an input DVB-ASI signal and producing an output DVB-ASI signal and the inverted DVB-ASI signal.

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13. The apparatus of claim 12, wherein the distribution amplifier comprises the inverting adapter.

14. A system comprising:

10 a Digital Video Broadcast-Asynchronous Serial Interface (DVB-ASI) encoder producing a DVB-ASI output signal;

15 an amplification device comprising true and complement outputs and an input coupled to the DVB-ASI signal, the true output comprising the DVB-ASI signal and the complement output comprising an inverted DVB-ASI signal; and

20 an inverting adapter comprising a transformer comprising primary and secondary sides, wherein the primary side is coupled to the inverted DVB-ASI signal, wherein a polarity of the secondary side is opposite to a polarity of the primary side, and wherein each of the primary and secondary sides comprises an equivalent number of windings, whereby the inverting adapter inverts the inverted DVB-ASI signal to create an adapted DVB-ASI signal.

25 15. The system of claim 14, wherein the amplification device is selected from the group consisting essentially of a routing switcher and a distribution amplifier.

16. The system of claim 14, wherein the amplification device comprises the inverting adapter.

17. The system of claim 14 wherein the adapted DVB-ASI signal is coupled to a DVB-ASI device selected from the group consisting essentially of a recorder, a monitor, a decoder, a network, a transmitter, and a distribution amplifier.

18. The system of claim 14 wherein the amplification device comprises a routing switcher and wherein the system further comprises a Serial Digital Video (SDV) source that produces a source SDV signal that is coupled to the routing switcher, wherein the routing switcher produces an SDV signal and an inverted SDV signal, and wherein the SDV signal is coupled to the DVB-ASI encoder.

19. An inverting adapter for inverting Digital Video Broadcast-Asynchronous Serial Interface (DVB-ASI) signals, the inverting adapter comprising:

20 a transformer comprising primary and secondary sides, wherein each of the primary and secondary sides comprises an equivalent number of windings, wherein each of the primary and secondary sides comprise positive and negative connections, and wherein the negative connection of the primary side and the positive connection of the secondary side are grounded, whereby a polarity of the secondary side is opposite to a polarity of the primary side;

a body that encases the transformer;

30 an input coupling adapted to accept a DVB-ASI signal and comprising an input shell and an input interconnection

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device, wherein the input shell is electrically and mechanically coupled to the body and is electrically coupled to ground; and

an output coupling comprising an output shell and an output interconnection device, wherein the output shell is electrically and mechanically coupled to the body and is electrically coupled to ground.

20. The inverting adapter of claim 19 wherein the input interconnection device comprises an input pin, wherein the output interconnection device comprises an output receptacle, wherein the input pin is coupled to the positive connection of the primary side, and wherein the output receptacle is coupled to the negative connection of the secondary side.

21. (Amended) The inverting adapter of claim [0] 20 wherein the input coupling is a male British Naval Connector (BNC) and wherein the output coupling is a female BNC.

22. A digital video system that processes Digital Video Broadcast-Asynchronous Serial Interface (DVB-ASI) signals, wherein the improvement comprises:

an inverting adapter adapted to invert the inverted DVB-ASI signal.

23. (Amended) The apparatus system of claim 22 wherein the inverting adapter comprises a transformer coupled to the inverted DVB-ASI signal, the transformer comprising primary and secondary sides.

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24. A method for processing Digital Video Broadcast-Asynchronous Serial Interface (DVB-ASI) signals, the method comprising the steps of:

generating a DVB-ASI signal and an inverted DVB-ASI
5 signal; and

inverting the inverted DVB-ASI signal to create an adapted DVB-ASI signal.

25. (Amended) The method of claim 24:

10 further comprising the steps of:

providing [a] an inverting adapter comprising a transformer comprising primary and secondary sides, wherein each of the primary and secondary sides comprises an equivalent number of windings, wherein each of the primary and secondary sides comprise positive and negative connections, and wherein the negative connection of the primary side and the positive connection of the secondary side are grounded, whereby a polarity of the secondary side is opposite to a polarity of the primary side; and

20 coupling the inverted DVB-ASI signal to the positive connection of the primary side; and

25 wherein the inverting adapter performs the step of inverting the inverted DVB-ASI signal to create an adapted DVB-
ASI signal.